6BQ6GTB/6CU6

Beam Power Tube

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3	volts
Current	1.2	amp

Direct Interelectrode Capacitances (Approx.):[a]

Grid No.1 to plate	0.6	μμf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	15	μμf
Plate to cathode & grid No.3, grid No.2, and heater	7	μμf ←

Characteristics, Class A_1 Amplifier: ←

Plate Voltage	60	150	250	volts
Grid-No.2 Voltage	150	150	150	volts
Grid-No.1 Voltage	0	-22.5	-22.5	volts
Mu-Factor, Grid No.2 to Grid No.1	-	4.3	-	
Plate Resistance (Approx.)	-	-	14500	ohms
Transconductance	-	-	5900	μmhos
Plate Current	260[b]	-	57	ma
Grid-No.2 Current	26[b]	-	2.1	ma
Grid-No.1 Voltage (Approx.) for plate ma. = 1	-	-	-43	volts

Mechanical: ←

Operating Position	Any
Maximum Overall Length	3-7/8"
Seated Length	2-7/8" to 3-5/16"
Maximum Diameter	1-9/32"
Bulb	T9
Cap	Skirted Miniature (JEDEC No.C1-2, C1-3, or C1-33)

Bases (Alternates):
- Intermediate-Shell Octal:
  - 7-Pin, Arrangement 1 (JEDEC Group 1, No.B7-7)
  - 6-Pin, Arrangement 2 (JEDEC Group 1, No.B6-81)
- Short Intermediate-Shell Octal with External Barriers:
  - 7-Pin (JEDEC Group 1, No.B7-59)
  - 6-Pin, Arrangement 2 (JEDEC Group 1, No.B6-84)
  - 5-Pin, Arrangement 3 (JEDEC Group 1, No.B5-187)

Basing Designation for BOTTOM VIEW . . . 6AM

Pin 1[c] - No Connection
Pin 2 - Heater
Pin 3[c] - No Connection
Pin 4 - Grid No.2
Pin 5 - Grid No.1
Pin 7 - Heater
Pin 8 - Cathode, Grid No.3
Cap - Plate

← Indicates a change.

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HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, *Design-Center Values Except as Noted:*

For operation in a 525-line, 30-frame system[d]

DC PLATE-SUPPLY VOLTAGE	600	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE (Absolute maximum)[e]	6000[f]	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1250	max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	200	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 (CONTROL-GRID) VOLTAGE	300	max.	volts
CATHODE CURRENT:			
Peak	400	max.	ma
→ Average	110	max.	ma
GRID-No.2 INPUT	2.5	max.	watts
PLATE DISSIPATION[g]	11	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[h]	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	220	max.	°C

→ Maximum Circuit Values:

Grid-No.1-Circuit Resistance	0.47	max.	megohm

[a] Without external shield.

[b] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

[c] On the 6-pin bases, pin 1 as well as pin 6 is omitted. On the 5-pin base, pins 1 and 3 as well as pin 6 are omitted.

[d] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

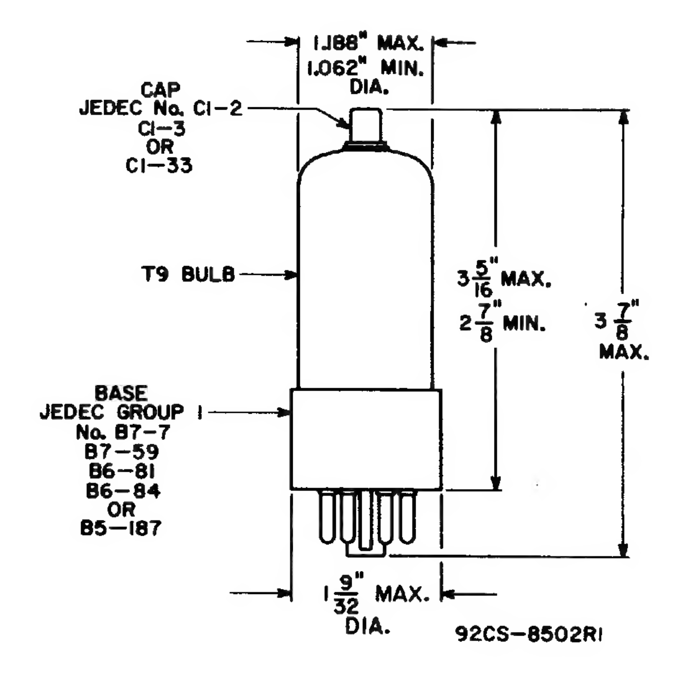
[e] This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

[f] Under no circumstances should this absolute value be exceeded.

[g] An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

[h] The dc component must not exceed 100 volts.

→ Indicates a change.


1.188" MAX.
1.062" MIN.
DIA.
CAP
JEDEC No. C1-2
C1-3
OR
C1-33
T9 BULB
3 5/16" MAX.
2 7/8" MIN.
3 7/8"
MAX.
BASE
JEDEC GROUP 1
No. B7-7
B7-59
B6-81
B6-84
OR
B5-187
1 9/32" MAX.
DIA.
92CS-8502R1

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AVERAGE CHARACTERISTICS

